UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,560	02/24/2000	Yudong Sun	ST9-99-153	6032

23373	7590	04/18/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER
BASEHOAR, ADAM L

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

MAR 1 8 2006

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/512,560
Filing Date: February 24, 2000
Appellant(s): SUN, YUDONG

Timothy P. Cremen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 03/20/06 appealing from the Office action mailed

08/24/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

W3C's "Introduction to CSS2", http://www.w3.org/TR/REC-CSS2/intro.html#processing-model,

05/12/98

WO 98/14896   Traughber   04/09/98

Rotter, Matt "Getting started with Cascading Style Sheets," http://builder.com/5100-31-

5074849.html, 09/29/03, pp. 1-2

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a

prior Office action.

Claim Rejections - 35 USC § 101

Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter. All the elements of the apparatus claim could be implemented in

software alone (Specification: page 10, lines 10-12). Thus the claim is non-statutory under 35

U.S.C 101 as not being tangibly embodied.

Claim Rejections - 35 USC § 103

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over W3C's

"Introduction to CSS2", http://www.w3.org/TR/REC-CSS2/intro.html#processing-model,

05/12/98 in view of Traughber (WO-98/14896 04/09/08).

-In regard to independent claims 1, 11, and 21, W3C teaches a user agent computer

processing method, system, and article of manufacture, wherein the method "parses the source

document (HTML) and create a document tree", wherein the step of creating could generate a

corresponding "DOM"; "retrieving all style sheets associated with the document that are

specified for the target media type"; "Annotate every element of the document tree by assigning

a single value to every property that is applicable to the target media type"; "From the annotated

document tree, generating a *formatting structure*"; and "Transfer the formatting structure to the

target medium (e.g., print the results, display them on the screen, render them as speech, etc.)"

(Section: 2.3 The CSS2 processing model: Steps 1-6). W3C does not teach that customizing a

requested document is done on the document server side. Traughber teaches that customizing the

requested document was done on the server side (Page 2, lines 3-14)(Fig. 2: 32). It would have

been obvious to one of ordinary skill in the art, to have customized a requested HTML document

for target device on the server side as shown in Traughber, because Traughber teaches it was

notoriously well known in the art at the time of the invention for servers to customize documents

to be sent to user agent web browsers (Page 2, lines 3-14)(Abstract)(Fig. 2: 32), which would

provide the well known benefit of reducing the processing load on the client side by processing

the document on the server-side. In addition it was also notoriously well known in the art at the

time of the invention for servers to customize documents to be sent to clients for the purpose of

advertisements or display capablities by passing cookie data (user prefereces) from the client to

the server so the server could better deliver user prefered customized data.

W3C also does not specifically teach flattening the DOM to generate the transformed

document. As stated by the applicant, "flattening" a DOM strictly means converting it back into

standard HTML format and that "flattening" was well known in the art and thus would have been

obvious (page 16, lines 15-19). The process of which would have been equivalent displaying the

formatting structure on the target medium display (Section: 2.3 The CSS2 processing model:

Step 6).

-In regard to dependent claims 2, 12, and 22, W3C further teaches wherein the style sheet

is a cascading style sheet (CSS) (Section: 2.3 The CSS2 processing model).

-In regard to dependent claims 3, 13, and 23, W3C further teaches "identifying the target

media type" and "Annotate every element of the document tree by assigning a single value to

every property that is applicable to the target media type"(Section: 2.3 The CSS2 processing

model; Steps 2-4).

-In regard to dependent claims 4, 14, and 24, Traughber further teach the "the web server

recieves a request for an HTML page" (column 2, lines 3-4) from a client browser (Fig. 2: 30). It

would have been obvious to one of ordinary skill in the art for a server to receive a request for a

document from a client, because Traughber teaches that it was notoriously well known in the art

that for a client to receive a document (HTML Page) from a server system, it must request it and

the server must process that request.

-In regard to dependent claims 5, 15, and 25, Traughber further teach wherein the client

contains a Web browser (Fig. 2: 30). It would have been obvious to one of ordinary skill in the

art at the time of the invention, for the client (user agent) of W3C to have had a Web browser

because Traughber teaches it was well notoriously well known in the art to use a Web browser to

provide the benefit of access to documents on a server which is the embodiment of the invention.

-In regard to dependent claims 6, 16, and 26, W3C further teaches wherein the style sheet

can contain "@media rule specifies the target media types (separated by commas) of a set of

rules (delimited by curly braces). The @media construct allows style sheet rules for various

media in the same style sheet." (Section: 7.2.1 The @media rule)

-In regard to dependent claims 7-8, 17-18, and 27-28, W3C further teaches wherein the

style sheet is stored "either within the HTML document" (separate portion of document), "or via

an external style sheet" (separate data file) (Section: 2.1 A brief CSS2 tutorial for HTML).

-In regard to dependent claims 9, 19, and 29, W3C further teaches "transfering the

formatting structure to the target medium (e.g., print the results, display them on the screen,

render them as speech, etc.)" (Section: 2.3 The CSS2 processing model).

-In regard to dependent claims 10, 20, and 30, W3C further teaches genereating nothing

(removing) at least one object of the DOM in a response to a style sheet removal of an HTML

element, wherein"if an element in the document tree has a value of 'none' for the 'display'

property, that element will generate nothing in the formatting structure," (Section: 2.3 The CSS2

processing model; Step 5)

(10) Response to Argument

-The Examiner respectfully disagrees with the Appellant's argument that the rejection

under 35 U.S.C. 101 of claim 11 was incorrect. The Examiner notes that claim 11 has been

rejected as being non-statutory subject matter under 35 U.S.C. 101 as not being tangibly

embodied because all the elements to the claims could be implemented as software alone.

The elements of the system of claim 11 represent functional descriptive material that

includes data structures and computer programs. A data structure by definition is a physical or

logical relationship among data elements, designed to support specific data manipulation

functions. In claim 11 the logical relationship between the different modules of the system make

up said data structure. The modules themselves can merely be implemented as software code

(Specification: Page 10: Lines 10-12: "the modules may be implemented as software"). The

Examiner notes that where there is no evidence in the specification that a term or phrase which

may be interpreted as software, hardware, or combinations thereof not necessarily including

hardware, it should be interpreted in its broadest reasonable sense as software.

Having established that said computer related system of claim 11 constitutes functional

descriptive material, it is important to point out that functional descriptive material per se is not

statutory. Functional descriptive material must be claimed in combination with an appropriate

computer readable medium to enable the functionality to be realized for producing a useful,

concrete, and tangible result when used in the computer system. Thus looking at rejected claim

11 there exists no computer readable medium and thus no necessary hardware to realize the

functionality of the software modules in the computer system. The Examiner notes that the

computer readable medium must be a physical structure and not merely a signal which permits

the functionality to be realized with the computer. Said non-statutory combination of software

and signals is a possible implementation of Appellant's claim 11 (Specification: Page 10: Lines

10-12: "modules may be implemented in software"; Lines 13-15: "a module may include any

type of computer instruction or computer executable code....transmitted as electronic signals

over a system bus or network." Accordingly the rejection of claim 11 as not being tangibly

embodied is considered proper.

The Examiner also believes that claim 11 is non-statutory under 35 U.S.C. 101 for failing

to produce a useful, concrete, and tangible result. Specifically claim 11 does not produce a

tangible result. Looking at claim 11 it is shown that the incorporated modules are "configured to

parse", "configured to obtain", "configured to apply", and "configured to flatten." However said

recitations are merely inactive steps wherein no processing actually takes place and thus no

tangible result is generated. Whereas claim 11 teaches inactive steps, substantially similar

independent claim 1 clearly teaches active steps that include "parsing", "obtaining", "applying"

and "flattening" which in turn produce a tangible result. By looking at the contrast between the

two claims it can be shown that just because a module is "configured to" do something does not

necessarily mean it actually does it.

-The Examiner respectfully disagrees with the Appellant's argument that the Intro to CSS2 and Traughber references, either alone or in combination, fail to teach or suggest: (A) applying "at least one rule of the style sheet to the DOM" in a document server, where the style sheet rule was directed to a target device; and (B) "flattening the DOM to generate therefrom a corresponding transformed document suitable for display by the target device."

With regard to argument (A), the Examiner respectfully disagrees with the Appellant's remarks. As discussed in the rejection of the claims, the Intro to CSS2 reference clearly teaches applying at least one rule of the style sheet to the DOM at the user agent (i.e. client side). The Examiner agrees that the Intro to CSS2 reference does not teach wherein the document customization utilizing the style sheet was done at a server side. Thus Intro to CSS2 alone lacks a proper motivation to customize documents on a document server instead of on the client system. The Traughber reference has been relied upon to teach that sever side document customization processing was notoriously well known in the art at the time of the invention. The Traughber reference teaches customizing a HTML web page by parsing a retrieved template and embedding data therein. The Examiner agrees that the Traughber does not specifically specify the use of style sheets in the customization process, however the Examiner notes that Traughber was not being relied upon for said feature. Said feature had already been established in the Intro to CSS2 reference.

With regard to argument (B), the Examiner respectfully disagrees with the Appellant's remarks. The Examiner noted in the rejection of the claims that the Intro to CSS2 did not specifically recite flattening the document object model tree. However the Examiner noted that the Intro to CSS2 did teach taking the annotated document model tree and generating a

formatting structure, wherein said formatting structure was then transferred to the target medium

for display (Section: 2.3 The CSS2 processing model: Steps 5 & 6: "From the annotated

document tree, generate a formatting structure" and " transfer the formatting structure to the

target medium."). The Examiner consides this two step process to be equivalent to the

"flattening the DOM to generate therefrom a corresponding transformed document suitable for

display by the target device." Said equivalence was determined based on the Appellant's own

definition of "flattening", which states flattening refers to a process of converting the DOM back

into an equivalent document including one or more elements, wherein the resulting document

was designated as "transformed" because the style sheet application will be reflected in the

elements of the transformed document (Specification: Page 16: Lines 15-20). Thus the Intro to

CSS2 clearly shows taking the annotated DOM ("From the annotated document tree") and

flattening it ("generating a formatting structure") to generate a corresponding transformed

document ("often the formatting structure closely resembles....more or less information than the

document tree"). Because the formatting structure was utilized for displaying the original source

document ("Transfer the formatting structure....etc") after the application of the style sheets

(Steps: 3 &4), the formatting structure thus reflected the change in the source document elements

as designated by the flattening process. The Examiner finally wishes to point out wherein the

Appellant's specification taught that techniques for "flattening" a DOM were well known and

appreciated by one of ordinary skill in the art (Specification: Page 16: Lines: 17-18).

Finally Appellant argues that the prior art does not supply the motivation to combine the

references. Again the Examiner explicitly points out that the Intro to CSS2 reference has been

relied upon to teach document customization utilizing style sheets for a given target device and

the associated benefits. Since the Intro to CSS2 reference only teaches client side processing there is a need to show and provided motivation for server side document customization. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Traughber teaches sever side (Fig. 2: 32) document processing for a requesting client browser (Fig. 2: 30). Further, Traughber teaches the benefit of server side document customization being that the processing load of the customization was located on the server side and not resident on the client (Fig. 2)(Page 3: Lines 17-19: "browser 30 operates on a separate CPU than the CPU 32"). Appellant's assertion that said motivation cannot be used in the support of the instant rejection is unfounded. Traughber clearly teaches the simple benefit of decreased processing load on the client by showing that the processing was done on the server side. Thus the user agent of Intro to CSS2 could be spared the computer resources of applying the style sheet at the user agent.

The Examiner notes that throughout the prosecution of the application the Examiner has tried to point out additional notoriously well known benefits outside of the applied prior art of sever side processing based on a user target device to further clarify that sever side processing was well known and not generally considered to be a novel limitation to the Appellant's invention. An example of said motivation was provided in the final office action mailed 04/21/04, which stated that it would have been obvious to one of ordinary skill in the art at the

time of the invention to have provided server side processing of style sheets because it was well

known in the art that some end-user client devices did no support cascading style-sheet

processing. The Examiner reiterated that said statement was notoriously well known in the art

and brought in evidence in the form of art, "Getting started with Cascading Style Sheets", which

stated that certain versions of popular client side browsers (i.e. "Microsoft Internet Explorer" and

"Netscape Navigator") did not support Cascading Style Sheets, Level 1 (CSS1) (i.e. Version 3 of

Microsoft Internet Explorer (August 1996) and Version 4 Netscape Navigator) or Cascading

Style Sheets, Level 2 (CSS2) (i.e. Version 4 of Microsoft Internet Explorer (September 1997)).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

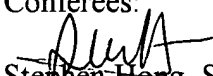Respectfully submitted,

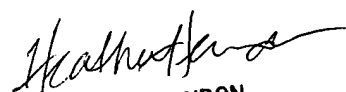Adam L Basehoar

March 29, 2006

STEPHEN HONG
SUPERVISORY PATENT EXAMINER

Conferees:

Stephen Hong, Supervisory Patent Examiner for GAU 2178

Heather Herndon, Supervisory Patent Examiner for GAU 2176

HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100